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ABSTRACT

The possibility of improving employability skills through cooperative education and tech prep was examined in an action research project involving high school students from two neighboring suburban communities in northern Illinois. The extent to which the schools were currently teaching employment and career development skills was examined by surveying the following groups: 106 current students; an unspecified number of graduates of both schools; 23 local employers; and 86 vocational and academic teachers. The surveys established that students and graduates lacked critical employability skills. A probable cause analysis was conducted. The results were used to develop an intervention emphasizing relevance to the real world and use of cooperative learning strategies to facilitate development of skills in the following areas: job search, communication, technological literacy, work ethics, critical thinking, work safety, teamwork, and career exploration. Postintervention surveys indicated that the intervention increased the students' confidence in their employability skills. (The bibliography lists 14 references. Appended are the following: high school student, high school graduate, employer, and teacher surveys; checklist listing workplace skills and career development competencies adopted by the Illinois State Board of Education as part of the Illinois Learning Standards; and a cooperative education evaluation form.) (MN)

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IMPROVING EMPLOYABILITY SKILLS THROUGH COOPERATIVE EDUCATION AND TECH PREP

Todd Cumming
Greta Lesniak

An Action Research Project Submitted to the Graduate Faculty of the

School of Education in Partial Fulfillment of the

Requirements for the Degree of Master of Arts in Teaching and Leadership

Saint Xavier University & SkyLight

Field-Based Master's Program

Chicago, Illinois

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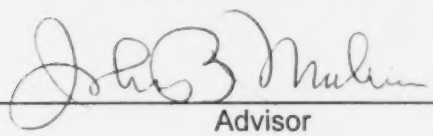

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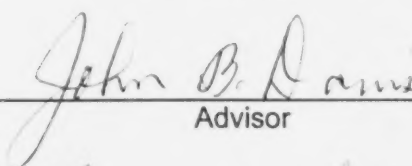

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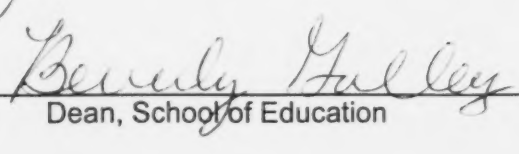

Dean, School of Education

IMPROVING EMPLOYABILITY SKILLS
THROUGH COOPERATIVE EDUCATION AND TECH PREP

Todd Cumming
Greta Lesniak

Abstract

This report describes a program for improving employability skills of high school students so that these students will be better prepared to enter the world of work. The targeted population consists of ninth through twelfth grade students, located in neighboring suburban communities in Northern Illinois. The problem of insufficient employment skills has been documented through data revealing large numbers of students unable to meet the demands of employers.

Analysis of probable cause data revealed that students reported a lack of employability skills. The probable causes of students' lack of the necessary skills for employment are due to: 1) district-mandated curriculum requirements, 2) employability skills not part of standardized testing, and 3) schools teaching to college-bound students. Also, according to research, this lack of skills is due to 1) difficulty to implement programs, 2) little evaluation available to determine effectiveness of programs, 3) students are not "engaged" in their learning, 4) high schools impervious to curriculum changes, and 5) few school-to-work coordinators in schools.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem resulted in the selection of one major objective. Students need to be prepared for the real world. In order to prepare students, they need to be taught: 1) employability skills, 2) communication skills, 3) educational relevance to the real world, and 4) interpersonal skills through cooperative learning strategies.

Post intervention data suggest that classroom interventions of job search skills, communication skills, technological literacy, work ethics, critical thinking skills, work safety knowledge, teamwork, and career exploration have increased the employability skills awareness of the students. Post surveys completed by students indicated that students feel confident of their employment abilities due to the interventions listed above.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted computer science classes experienced a lack of student achievement in transferring skills learned in the classroom environment to real life situations. Evidence of the existence of the problem included student surveys, graduate surveys, teacher surveys, business partner surveys, and assessments of student workplace skills.

Immediate Problem Context

The targeted school, one of two secondary schools in the district, housed 1,893 students in grades 9 through 12. Based on the 1997-1998 school year figures, the average class size was 24. The building was air conditioned and the structure consisted of the main building and three wings. The main building housed administrative offices, the media center, special education, the writing lab, and all classrooms for general education. The auditorium, the Little Theater, and all the art and music rooms were clustered into the north wing of the school, while the west wing housed all of the athletic rooms of the campus, including two gymnasiums and locker rooms, a dance studio, a wrestling room, a weight room, and a fitness center. Various shop classes, technology labs, a maintenance area, and a cafeteria made up the east wing of the targeted school.

As noted in the school report card (1998), the racial-ethnic makeup reported for the targeted school was 54.9% White, 30.5% Black, 11.6% Hispanic, 2.7% Asian/Pacific Islander, and .3% Native American. The percentage of students eligible

for bilingual education was 1.6%, which was much lower than the district average of 6.7%. Students who came from low income families made up 34.1%, considerably lower than 49.0% for the district. These students received public aid, lived in institutions for neglected or delinquent children, were supported in foster homes with public funds, or were eligible to receive free or reduced-price lunches. The targeted school had an attendance rate of 89.8% compared to 87.7% for the district. The number of students who enrolled in or left school during the school year, referred to as student mobility, made up 13.7% of the general student population, much higher than the district average of 9.6%. There was a 3.6% chronic truancy rate for the targeted school which was higher than the district rate of 1.6%.

There were 259 classroom teachers in the district. The racial-ethnic background of the teachers included 86.1% who were White, 8.9% who were Black, 4.6% who were Hispanic, and .4% who were Asian/Pacific Islander. Of the classroom teachers in the district, 43.0% were male and 57.0% were female. The district's pupil to teacher ratio was 24:1, and the average number of years of teaching experience was 15.4. Of the 259 classroom teachers, 37.9% had a bachelor's degree, and 62.1% had a master's degree or above.

Students were placed in classes at the targeted school according to gifted, "A" level, regular level, and special education tracks. All classes were 55 minutes in length with the exception of study halls which were 25 minutes opposite a 25 minute lunch period. There was a Tech Prep program which operated as a school within a school. In order to meet graduation requirements, all students at the targeted school had to complete 20 academic credits (full-year classes) and 40 hours of community service. Students were required to take four years of English, two years of mathematics, one year of social science, one year of United States history, two years of science, and four years of physical education. The latter included one semester of health and could include one semester of driver education. Electives composed the

remaining six credits, including at least one credit from either foreign language, art, music, or vocational education classes.

Students in the ninth and tenth grade Tech Prep program concentrated on writing and speaking skills. The materials were primarily teacher-created and interdisciplinary. Tech Prep included a required technology course in each of the four grades as well as an emphasis on the world of work beyond high school, with field trips and guest speakers forming an integral part of the program.

Students in the tenth grade were assessed by the Illinois Goal Assessment Program (IGAP) in reading, writing, and mathematics, while in the eleventh grade, IGAP tests included sections in science and social science. In addition, all freshmen, sophomores, and juniors were evaluated using the California Achievement Test (CAT). All students were graded quarterly on a district-wide basis and received two semester report cards. Mid quarter progress reports were sent home each quarter, allowing teachers to comment on student attitude and achievement either positively or negatively. Grading scales varied among departments and individual teachers. The two most commonly used grading scales included letter grades of A (93-100), B (86-92), C (78-85), D (70-77), and F (0-69) for weighted or A-level courses or A (90-100), B (80-89), C (70-79), D (60-69), and F (0-59) for R-level (regular) courses.

Special education students who were mainstreamed in the regular and "A" level tracks at the targeted school participated in all state and local assessments, while the 31 students placed in self-contained special education classrooms were exempt from state and local testing. The total number of students who received special education services at the targeted school was about 240.

The Surrounding Community

According to the Census of Population and Housing (1990), the targeted school was located in a city which consisted of 34 square miles and had a population of approximately 77,000. As of 1992, the median home value was $63,900. Over 65% of

the population were White, slightly less than 23% were Black, and 12% were Mexican-American. The median age was 31.5 Of the people in this city that were 18 years of age and older, 31% were high school graduates, 21% had some college credit, 5.9% had associate degrees, 8.7% had bachelor's degrees, and 4.6% had graduate or professional degrees. Of the people that were 18 years of age and older 18% of them finished some portion of 9th to 12th grades without a diploma, while 10% had less than 9th grade schooling.

National Context of the Problem

Transferring skills learned from the classroom environment to real life situations is a problem educators have recognized for many years. Students are taught how to read and write in English class and how to multiply and divide in mathematics class. Unfortunately, when the students leave a particular classroom, they find it difficult to transfer these skills from one subject area to another or to situations outside the school.

Students are not prepared for the real world, and perhaps present methods of instruction may not be adequate. Unfortunately, many teachers today are still using traditional methods of instruction and have not helped students see the connection between their learning and the outside world (Peters, 1991). If students cannot see the value or purpose of their school assignments, they will see the work as wearisome at best. This causes the student to be unmotivated, resulting in low achievement (LoVette & Jacob, 1995). General education students tend to drift along without direction, while students who enroll in college preparatory classes are well equipped to enter into a 4-year college or university. These college bound students usually have no workplace skills, though, because their education includes an emphasis on theory rather than application (Fagan & Lumley, 1996).

Generally speaking, many students today are not prepared for the real world. Schools have not emphasized to their faculties the importance of authentic tasks and assessments. Therefore, the students do not see the relevance of their education.

CHAPTER 2

Problem Evidence

Five types of data sources were used to document the problem that students in the high school generally lack employability skills. The targeted classrooms were vocational computer classes, Tech Prep, and Cooperative Education. First, four surveys were administered. One survey was administered to current students in each of the above-mentioned programs, while another survey was administered to local community businesses. The third survey was given to student graduates, and the last survey was administered to teachers. Second, a Workplace Skills Assessment from the Illinois State Board of Education was administered to the current students.

The main goal of the two student surveys was to understand if employability skills were taught in the classrooms, and if the students felt that they had received an adequate training to prepare them for the world of work. (Appendix A) (AppendixB) The surveys also focused on which employability skills the students were lacking. The primary goal for the employer survey was to determine what skills they thought high school students or graduates were lacking. The results showed that both current students and graduate students felt they were not prepared for the real world. Current students' percentages were consideralbly lower than graduate students' percentages indicating that after the graduates entered the work force, they realized they were not as prepared as they thought they should be for employment. Results of the 106 student surveys are presented in Figure 1.

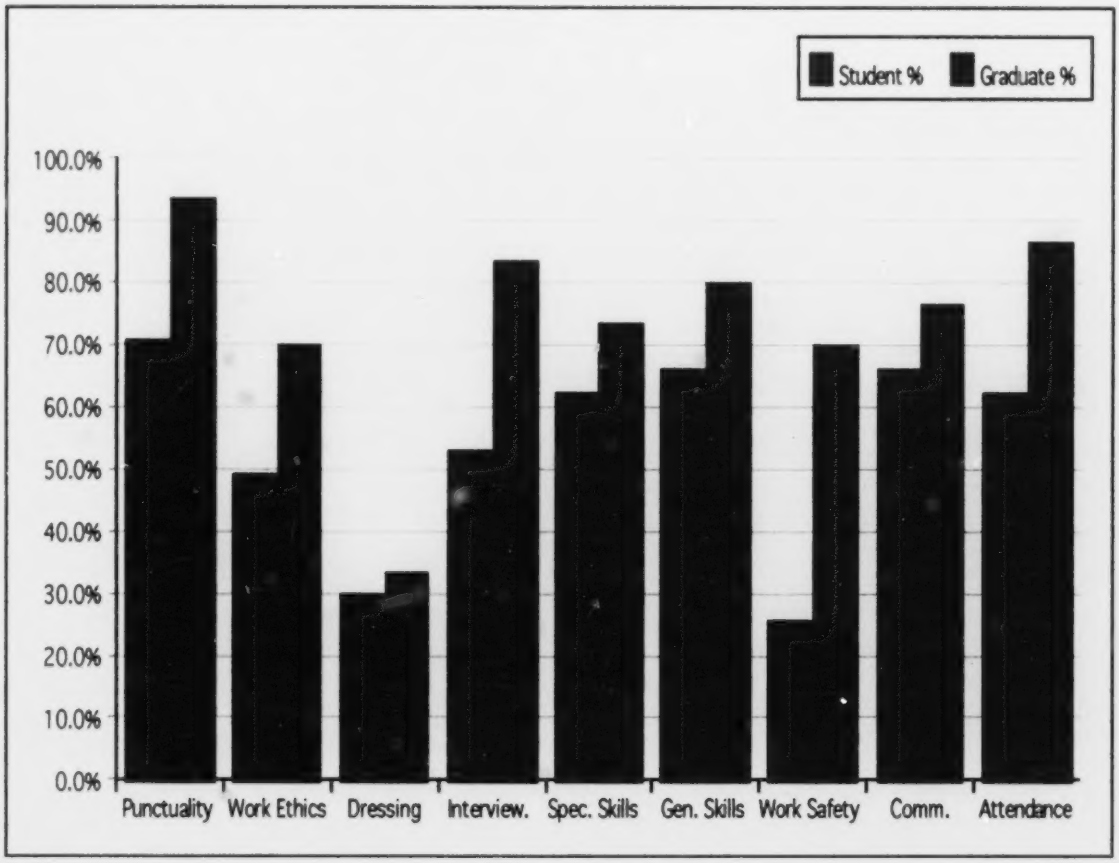

Figure 1. Employability skills survey results

A third form of data collection given was the employer survey (Appendix C). Sixty-eight percent of the employers surveyed felt that students were most deficient in the area of interview skills. Fifty-six percent of the employers surveyed indicated that the students were lacking in technical job skills and 81% percent of the employers indicated that the students were best prepared in communication skills. A summary of the results from the 23 employers' surveys are presented in Figure 2.

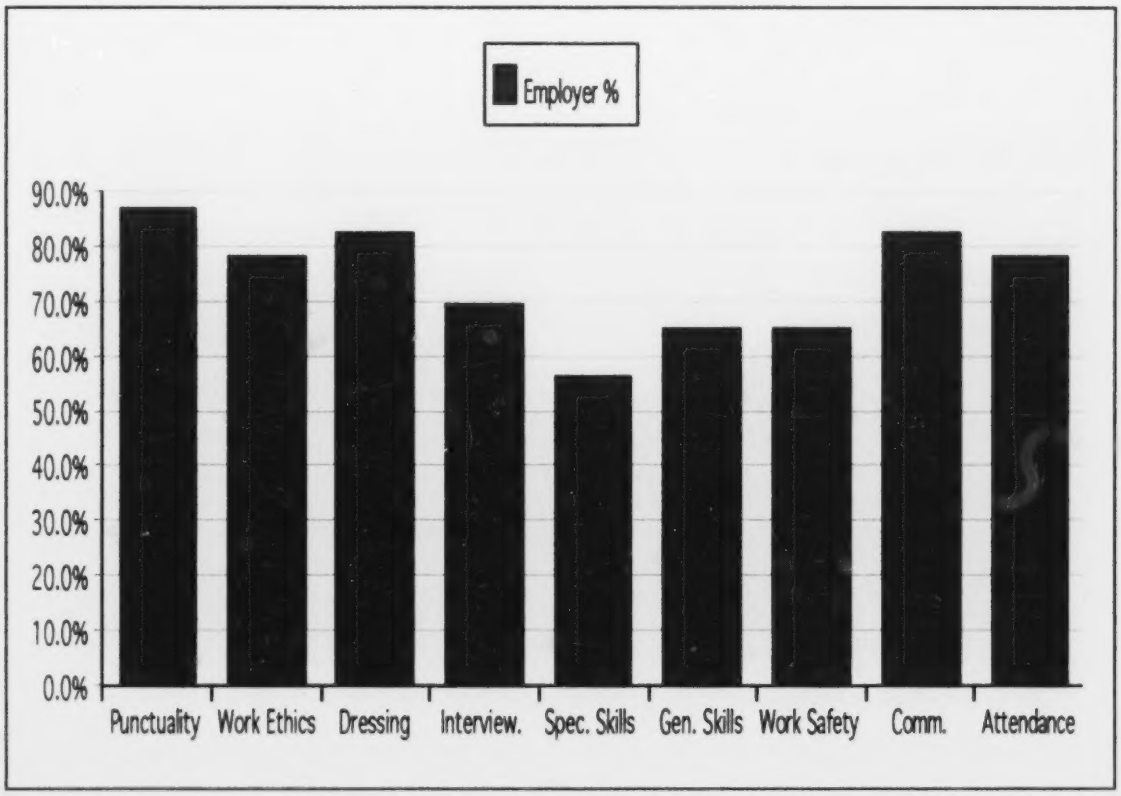

Figure 2. Results of employer survey regarding employability skills

Overall, the results of the employers' and students' surveys indicated that the students exhibited an unacceptable level of employment skills.

Both students and employers felt that the students are not being taught the necessary skills that employers are looking for. Based on these findings, employability skills are perceived to be at a below-average level.

A fourth form of data collection was the teacher survey (Appendix D). Teachers were asked if they taught employability skills in their classes. The teachers were placed in two categories: those in vocational classes, and those not in vocational classes. The results of the survey indicated that 82% of the vocational teachers surveyed do teach employability skills, while only 51% of the nonvocational teachers

teach employability skills. Sixty-two percent of the teachers felt that the high school students were not prepared for the world of work, and 53% of the teachers indicated that students do not get the vocational training they need to pursue their career. Figure 3 presents a summary of the results from the 86 teacher surveys indicating whether employability skills are being taught in their classroom.

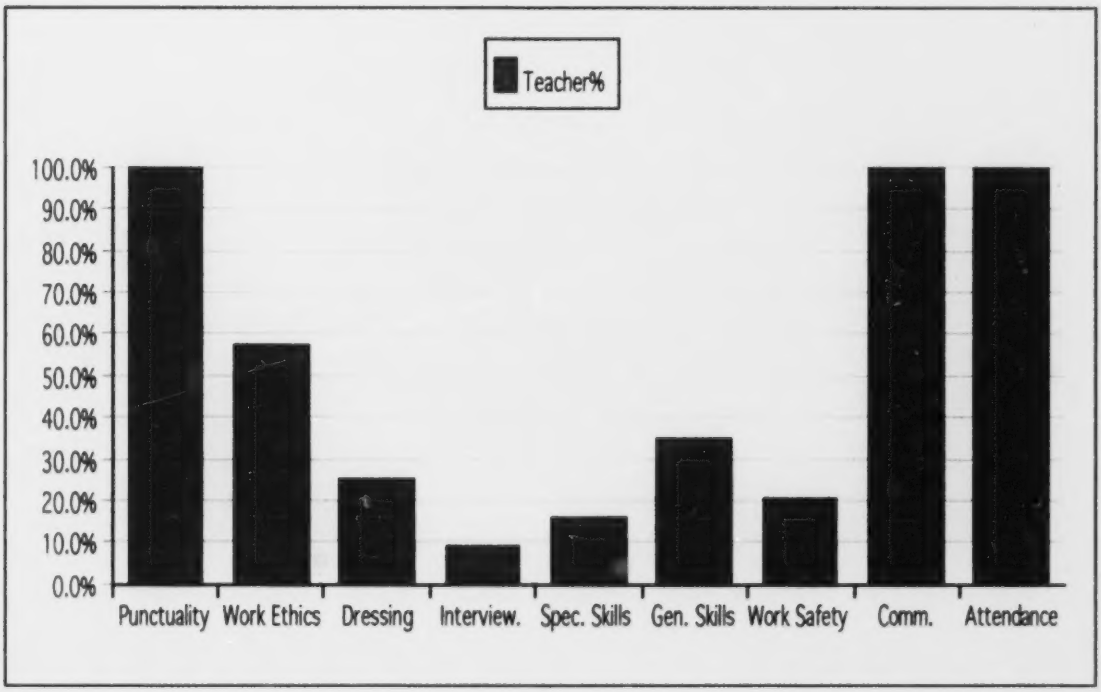

Figure 3. Results of teacher survey on teaching employability skills

A fifth form of data collection was a Workplace Skills Assessment from the Illinois State Board of Education. (Appendix E) The checklist was given to graduate students and current students. The best indicator at this time was the graduate students because they had completed their high school years. Results indicated that 76.9% of students enrolled in vocational classes had developed most competencies in the workplace skills, but only 52.9% of students enrolled in nonvocational classes

had developed most competencies in the workplace skills. A summary of the results is presented in Figure 4.

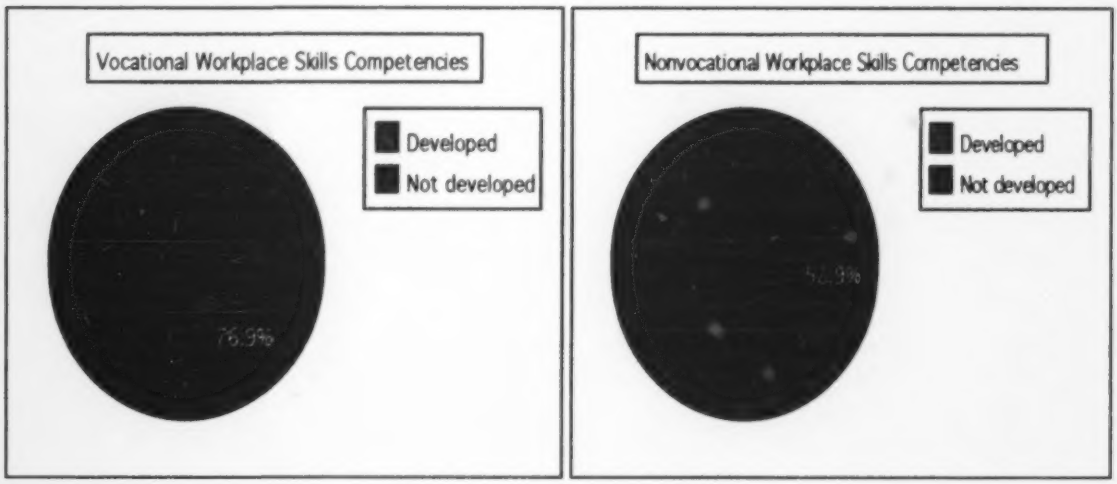

Figure 4. Comparison of workplace skills competencies

Probable Causes

Data were collected from the four surveys and the workplace skills assessment. The data indicated that 59% of the teachers surveyed were currently using employment skills training as part of their curriculum, but 58% of those teachers surveyed felt that their school was not preparing the students for the work world. The high school student surveys and graduate student surveys showed that employability skills were not consistently taught as part of their high school curriculum. The results of all data indicated that students are not prepared for the world of work because they are not being taught the skills.

The literature confirmed what the surveys from students, teachers, and employers indicated. The students do lack employability skills. So why are high schools not better preparing students for the school to work transition? Probable causes for employability skills not being an intregal part of the educational process

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could be that there is limited time to cover district mandated curriculum requirements. Also, employability skills are not part of standardized tests such as Illinois Goal Assessment Program (IGAP), California Achievement Testing (CAT), and American College Testing (ACT). Schools feel the need to raise the scores of the standardized tests because the scores are recorded in published school report cards. Standardized test scores reflect the school's ability to prepare students for college. Many parents and districts believe that the college-bound track is the only option for post-secondary success. According to Brand (1990), the current policy on education is targeted to young people who go on to college.

Another fundamental problem with schools is that the school curriculum has become disconnected from real work. According to Barton of the Educational Testing Service, research on school reform indicates that high schools have been almost impervious to changes in the curriculum, even though of those students who started in community colleges after high school, only 37% had attained any degree five years later. Murnane of Harvard University, stated in the same article that of those who enrolled at a four-year campus, only 47% had a degree five years later. High school graduates who lack some sort of preparation for work beyond the traditional graduation requirements, such as a certificate of mastery, will not get far in the job market of the future (as cited in Lewis, 1998).

Finally, research has indicated the schools have not completely conformed to the 1990 Perkins Act which requires states to develop accountability systems that include performance measures and standards for secondary and post-secondary vocational education programs. This legislation requires specifically notes that states address five program performance measures. These include student retention, job placement, competency gains in academics, work or job skill attainment, and vocational competency attainment. The Carl Perkins Act states that each state receiving funding is responsible for annually evaluating student progress and

assessing the overall effectiveness of the states' Tech Prep delivery systems (Brown,1992).

In conclusion, more time needs to be devoted in the curriculum by all the disciplines, not only the Vocational Education department to improve students' employability skills. The school district as a whole needs to revisit the processes needed to keep in step with the ever-changing work environment. Schools are accountable to the public they serve and the students they educate.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

The 1990 Carl Perkins Tech Prep Legislation requires that states address five program performance measures. These include student retention, job placement, competency gains in academics, work or job skill attainment, and vocational competency attainment (Brown, 1998). This legislation forces Tech Prep to teach employability skills to students. While most high schools teach to the college-bound students, 25 million young people between the ages of 18 and 24 do not go to college. They are entering the work force with few skills that are transferable from the classroom to the office (Olson, 1998). Therefore, educators need to prepare every student for the real world.

Approximately 85% of students today are not "engaged" by the work they do in schools, finding it neither relevant nor interesting (Lewis, 1998). If that is the case, they certainly do not do as well as they should. According to school administrators and teachers, students who see connections between classroom learning and the workplace are more eager to learn, and because they see a purpose to learning, they are more likely to stay in school (Olson, 1998). Tech Prep is a program that engages the students so their education seems relevant to them. Relating classroom learning to topics people deal with in their everyday life adds relevance as well as motivation for learning (Hoye, 1995). Tech Prep provides curricula and instruction that blend secondary and post secondary education to increase students' success and develop skills in conjunction with the employment requirements of the business sector (Moore, 1994).

Students involved in Tech Prep are taught the same concepts as they would learn in other classes, but the methods of instruction are different. Instead of learning how to type a letter by copying a letter that has already been written, the students learn how to type a letter by actually composing one themselves and sending it in the mail. By assigning authentic tasks students can relate their instruction to the real world. Because they are continually composing their work, their writing skills also improve. Within the Tech Prep program, students are involved in cooperative learning. Many of their projects involve working together and forming teams to accomplish a task. This teamwork is very important since today's businesses stress the importance of teamwork on the job. Students involved in Tech Prep also develop good communication skills because they continually must speak in front of small groups, large groups, and to the business community.

Another suggestion to improve employability skills is to form business partner relationships between the businesses and the schools. Implementation of Tech Prep has provided better means for local business and community members to establish a working relationship with educators (Jacobs, 1998). Tech Prep and Cooperative Education have developed many business partnerships, and these partnerships have helped in providing the students with first-hand experience of the world of work. According to Black (1995), schools should develop strong business partnership agreements for each career path, including job shadowing, mentoring, internships, classroom visits, presentations, and visits to businesses. The experience a student gains while participating in internships, mentoring, and job shadowing is basic to the purpose of the program.

There are many businesses that would like to be involved, but have not yet quite figured out how to do it, particularly small businesses because of the commitment to make sure the work and the internships or work-based learning experience are tied to the academics (Dembicki, 1998). Michigan's top accomplishment has been

garnering school-to-work support from the Big Three automakers: Ford, General Motors and Daimler/Chrysler. "Michigan is a labor state. When other states are abandoning the word 'work', we are embracing it" (Cahill, 1998, p.26). Schools and businesses join forces with a certain amount of civic responsibility. But, Olson (1988) reminds us, both schools and businesses have self-interests and an expectation that, through their shared venture, they will come out as winners. For businesses, the payoff is partly public relations. In other cases, businesses use their links with schools to recruit minority students to increase workplace diversity.

A third suggestion for improving employability skills is to use career tracking. Current educational reform initiatives challenge educators, employers, parents, and community members to help all students make informed career decisions based on relevant career information; students' personal knowledge of their interest, aptitudes, abilities, and attitudes; and support by related course work in elementary, middle level, high school, and post-secondary education. Career pathways give focus to academic and technical course work since they represent coherent programs of study leading to careers in a technological society (Wacker, 1995). They focus on career tracks so each student is aware of fields that they could be interested in and are given opportunities to explore their choices so they can make some decisions for the future. If these students then are given an opportunity to work for a business that is in their career track, they will gain first-hand knowledge of the career itself, and this will help them to prepare themselves for life after graduation. The experience a student gains while participating in internships, mentoring, and job shadowing is basic to the purpose of the program (Black, 1995).

The curriculum for Tech Prep and Cooperative Education students also focuses on preparing the students for seeking employment. Students must develop a well-written resumé, learn how to complete job applications correctly, and communicate effectively on a job interview. These skills are very important to the success of the

student and should be taught in the high schools today.

In the search for solutions to prepare students for the world of work, research of literature uncovered information which validates the implementation of ideas and concepts that are necessary for bringing about systemic change in today's high school curriculum. Among the suggestions are incorporating Tech Prep, forming business partner relationships, and career tracking

In order to improve employability skills in the high schools today, education has to change. Teachers have to make their teaching relevant to the real world, and students need to develop workplace skills that will enable them to be successful in society. We need to prepare them for their future.

Project Objectives and Processes

As a result of increased instructional emphasis on employability skills during the period of September, 1999 through January, 2000, the targeted classrooms will develop more effective ways of communicating, good work ethics and habits, job search and interviewing techniques, and specific job skills as measured by assessments, surveys, and checklists.

In order to accomplish the terminal objective, the following processes are necessary:

1) Recruit students for Tech Prep and Cooperative Education.
2) Make education relevant to real life.
3) Develop appropriate lesson plans to teach employability skills.
4) Create staff development workshops to teach staff how to incorporate employability skills into their curriculum.

Project Action Plan

Action Plan for Intervention

The action plan is presented in outline form by weeks rather than specific dates. The schedule covers the time between the first week of October, 1999 and extends

through the first semester which is in January, 2000. The action plan to be used in the Vocational Computer Classes, Tech Prep Computer Classes, and Cooperative Education classe is as follows:

Week 1, 2, 3	**Job Search** Resume Cover Letter Thank-You Letter Business Cards Job Application Mock Interviews Speakers
Week 4	**Communication Skills (Ongoing)** Reading Writing Listening Speaking
Week 5	**Technological Literacy (Ongoing)**
Week 6	**Work Ethics** Simulations Speakers
Week 7	**Critical Thinking Skills (Ongoing)** Simulations
Week 8	**Work Safety** Simulations Speakers
Week 9	**Teamwork** Simulations Speakers
Week 10-13	**Career Unit** Job Interest Survey Internet Career Search Identify Short/Long Term Goals Career Report Career Fair

Methods of Assessment

To evaluate whether the interventions which were implemented improved the students' "Employability Skills", the following assessments were utilized:

1. Student Survey (Appendix A)
2. High School Graduate Survey (Appendix B)
3. Cooperative Education Evaluation (Appendix F)
4. Workplace Skills Assessment (Appendix E)

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The project objective was to improve employability skills in high school students. To achieve this objective, a five-part action plan was implemented. First, a survey was administered to current students and recent graduates to determine their ideas and opinions on the status of present employment skill instruction. Second, a survey was distributed to local employers asking them if they felt current high school students or recent high school graduates were adequately trained for entry-level jobs. Third, a survey was given to teachers asking them if they teach employability skills in their classrooms, and if they feel that students were prepared for the work world. Fourth, high school students were given the Workplace Skills and Career Development Competencies Assessment adopted by the Illinois State Board of Education (ISBE). Finally, employment skills activities were developed through the use of job search projects, communication skills, technological literacy, work ethics, critical thinking skills, work safety, teamwork and career exploration. These employment skills activities were then implemented into the vocational computer classes, Tech Prep computer classes, and cooperative education class at the high school.

Data Collection

The first part of the action plan was to collect data to provide evidence of the existence of the problem. In the first month of school, the current high school students were surveyed in their homerooms (Appendix A). The purpose of the survey was to determine the students' perception of the employability skills taught in the present

curriculums. Next, recent high school graduates were surveyed to determine if they felt that their high school experience prepared them in their present employment situation (Appendix B). The next part of the action plan included surveying teachers (Appendix C). The purpose of this survey was to determine if employment skills were being taught in the present curriculums of their courses. The fourth part of the action plan was giving a survey to local employers (Appendix D). The survey was designed to show whether employers felt that high school graduates starting at an entry-level job were adequately trained.

Interventions

The first intervention was designed to improve job search techniques. Students created their own resumes and business cards. Through different activities, they learned how to write an appropriate cover letter and thank-you letter. They practiced filling out job applications. Those students with outstanding resumés and job applications were chosen to participate in mock job interviews. Students were told why or why not they were chosen for a job interview. If they were not chosen, they had to go back to their resumes and job applications and make corrections. As a grand finale, speakers were brought in from local businesses to talk to the students about applying for jobs, dressing for success, and good work ethics.

Another intervention used was to continually develop communication skills through reading, writing, speaking, and listening. An example of this intervention was a project done in Cooperative Education. Each student was to design a Power Point presentation about their work experience. They were given a rubric indicating how long the presentation needed to be, how many different technologies they were to use in their Power Point, what information they needed to include in it, and how they were to present it to the class. This was a real-life learning experience for them because

many of them will have to give Power Point presentations in their life time. They had to communicate through writing, reading, listening, and speaking.

Technological literacy was a very important intervention used in the classrooms. For example, in order to give a Power Point presentation, students had to learn the newest edition, they had to incorporate pictures from the Internet for their presentations, and they imported digital pictures from a digital camera and a scanner. New technologies continue to be taught in these classrooms so that students are knowledgeable of them when they reach the work force.

Another intervention used to improve employability skills was to teach work ethics. Job-related simulations were used in which the students cooperatively made decisions concerning whether or not employees were using good work ethics. Besides using simulated examples, students shared situations with the class that actually happened at their jobs and together the class discussed what happened and what should have happened. In order to stress the importance of good attendance and being on time, the Cooperative Education class used time cards as they entered the classroom. Each week the time cards were tallied, and those students with perfect attendance received a paycheck for $50.00. If a student was absent or tardy to class that week, their paycheck was considerably lower. These paychecks could be traded in for commodities at the school store.

An important intervention used was to teach students how to develop their critical thinking skills. Students in vocational computer classes, Tech Prep computer classes, and cooperative education were given a task to produce a magazine about the world of work. They needed to design this magazine from front to back including such things as articles, advertisements, advice columns, and comics. They had to make many decisions about their magazines as they worked on them. Other work simulation packets were developed where students needed to look at the job that

needed to be done and decide on their own how to accomplish it. The skills had been taught to them but when they had to apply them to real life, it was a challenge. By continually giving them projects where they had to decide what and how to accomplish the task, they became quite proficient.

Another important intervention used in the action plan involved incorporating instructional strategies to promote work safety. Students were given job simulations where they had to discuss various work hazards and what they should do about them. They were taught work safety through various activities and why it is so important to abide by the safety rules. Community leaders were also brought into the classrooms to speak on work safety.

Teamwork was another intervention used in computer classes and cooperative education class. An example of teamwork used was the "Prisoner's Dilemma" in which the class was divided into two teams. The purpose of the exercise was for each team to make as much money as they could and to show the advantages of teamwork and collaboration. When the activity was over, teams were brought together to discuss things important in a team such as trust, values, decision making, and goals. Another teamwork exercise was "An Amazing Experience Grid". For this activity, students were divided into groups and were given a grid on the floor in which they had to find the right pathway to the end. Each member of each team had to find the correct path, and the team that finished first was the winner. Team members couldn't talk to each other, but it was up to each team to develop ways to help each other get through the grid. When the activity was finished, the importance of teamwork was discussed and what could have happened in this activity to help the group to finish first. Many other teamwork activities were developed and implemented into the classrooms.

A final intervention used in the action plan was the development of a career unit for the students. This unit included job interest surveys, Internet career searches,

activities to identify short and long term goals, a career report, and the culminating event of a career fair. Students first completed a job interest survey which showed them what careers they should go into based on the information they gave on the survey. Using that information as a guide, students then used the Internet to research careers that they might be interested in. After their research, they wrote a career report. Following the career report, the students wrote short and long term goals. The culminating event for the career unit was a career fair. Community leaders were invited to speak, and students were able to choose which speakers to listen to based on their career reports. They learned from the speakers what education they needed for that particular career, how much money they would make, what type of individual the job required, and the importance of work ethics in that career. Students were able to ask questions and hear first hand what these careers were really like.

Presentation and Analysis of Results

In order to determine any improvement in student knowledge of employability skills, a presurvey and postsurvey (Appendix A) were given to current high school students. As was stated in Chapter Two, the results of the presurvey indicated that the students rated their employability training to be rather limited. The postsurvey indicated that the interventions used at the school greatly improved the students' perception of their employment skill education. Since the results of the students' perception of their employability skills was fairly close to the results of the employer survey, these researchers feel that the students' perception of their employability training is a useful gauge as to the effectiveness of the interventions. Judging by the results of the pre and postsurveys of current high school students, the researchers feel that these students are now considerably more prepared to enter the work force than they were prior to the interventions. The pre and postsurvey results are compared in Figure 5.

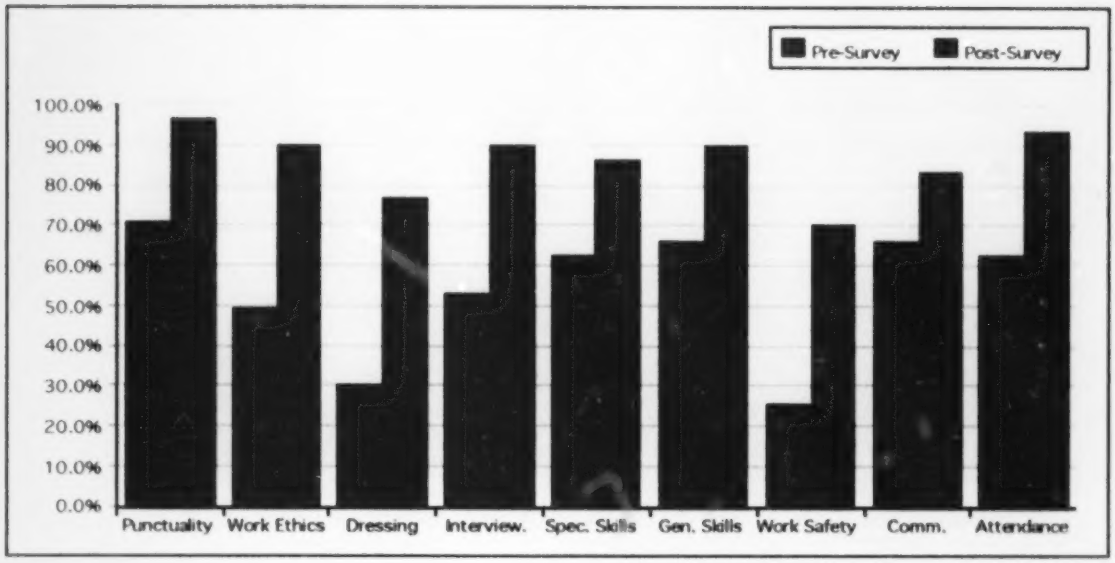

Figure 5. Results of pre and poststudent survey

As was illustrated in the bar graph in Figure 5, the current high school students reported that their training in the targeted skill areas increased considerably. In the presurvey 53% of the students surveyed felt especially deficient in the area of interview skills. As a result of the interventions, interview skills increased to 90%. Technical job skills went from 62% to 86%, an increase of 24%. In the areas of attendance and punctuality, the postsurvey showed that the students felt they had been taught the importance of them in the work place. Judging by the results of the pre and postsurveys of current high school students, the researchers feel that these students are now considerably more prepared to enter the work force than they were prior to the interventions.

Through the use of teamwork, students learned how to work together solving problems that confronted them. These teams, then, had to present their findings to the

class, which aided the students in their public speaking skills. This team building promoted professional work habits and students learned that by working as a team, work can be done more efficiently.

Teaching students how to effectively search for a job was a very important intervention. Some students have successfully started working at jobs and have expressed their gratitude for teaching them these skills.

Bringing the business community into the schools to speak to the students touched on several of the employability skills. The students heard from real employers, who are associated with large companies that offer goods jobs, speak about attendance, punctuality, teamwork, communication skills, and the importance of having an overall positive work attitude.

Conclusions and Recommendations

Based on the presentation and analysis of data, the students have shown improvement in their perception of employability skills education as witnessed by their demonstration of these skills in the classroom situation. The number of students who felt that all the employability skills were covered in their classes also increased.

Although improvements were noted in the above-mentioned area, the researchers feel that the improvements are restricted to those disciplines taught by the teacher researchers and not followed school wide. The researchers also feel that these skills should be covered in other classes throughout the school, so that positive influence could affect more students. The question in this project was "Are high schools producing employable graduates?" It seems that the answer to the question is that not enough schools are. Students have felt that the employability skills were not covered in their classes. Employers felt that many high school graduates did not demonstrate the necessary employability skills necessary to be desirable employees.

According to the teacher survey, most teachers do not cover the employability skills in their present curricula.

The teacher researchers were satisfied with the activities used in this intervention. The interventions did effectively increase the student's perception of the level of their employability education. It also seems to have had an effect on student behavior in the classroom. The teacher researchers feel that high schools should incorporate more employability education into the present curriculum and across the curriculum school wide.

In order to help students become employable, the ISBE has adapted the Workplace Skills And Career Development Competencies (Appendix E). Included in these workplace skills are the ability to be able to develop an employment plan, seek employment opportunities, accept employment, communicate on the job, interpret the economics of work, maintain professionalism, adapt and cope with change, and to solve problems using critical thinking skills. If students developed these skills and had the technical training for the desired job, they would become successful in today's world of work.

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Appendix A

High School Student Survey

Directions: Circle "Yes" or "No" for each of the following questions.

1. Have you decided what career you are interested in?
   Yes No

2. Has your counselor given you any help as far as "Employability Skills"?
   Yes No

3. Are you currently enrolled in any of the following programs?

Computer Classes	Yes	No
Industrial Technology	Yes	No
Family & Consumer Sciences	Yes	No
Cooperative Education	Yes	No
Tech Prep	Yes	No

4. Have you been taught the following **"Employability Skills"** in any high school course?

Punctuality	Yes	No
Professional Work Ethics	Yes	No
Dressing for Success	Yes	No
Interviewing Skills	Yes	No
Specific Job Skills	Yes	No
General Work Skills	Yes	No
Work Safety	Yes	No
Communication Skills	Yes	No
Attendance	Yes	No

5. Do you feel that your high school experience has helped you to become employable?
   Yes No

6. Do you feel that your high school has directed you to get the training you will need for your career?
   Yes No

Appendix B

High School Graduate Survey

Directions: Circle "Yes" or "No" for each of the following questions.

1. Have you decided what career you are interested in?
   Yes No

2. Has your counselor given you any help as far as "Employability Skills"?
   Yes No

3. Are you currently enrolled in any of the following programs?

Computer Classes	Yes	No
Industrial Technology	Yes	No
Family & Consumer Sciences	Yes	No
Cooperative Education	Yes	No
Tech Prep	Yes	No

4. Have you been taught the following **"Employability Skills"** in any high school course?

Punctuality	Yes	No
Professional Work Ethics	Yes	No
Dressing for Success	Yes	No
Interviewing Skills	Yes	No
Specific Job Skills	Yes	No
General Work Skills	Yes	No
Work Safety	Yes	No
Communication Skills	Yes	No
Attendance	Yes	No

5. Do you feel that your high school experience has helped you to become employable?
   Yes No

6. Do you feel that your high school has directed you to get the training you will need for your career?
   Yes No

Appendix C

Employer Survey

Dear Employer,

We feel it is so important to prepare our students to be successful in the work force. In order to do that, we are asking your help. Please complete the survey below and return it in the self-addressed, stamped envelope provided. This information will help us to determine the needs of our students so we can provide the appropriate training for them. Thank you for your time and consideration. Any questions or concerns, please call us at (815) 727-6950.

Sincerely,

Greta Lesniak
Todd Cumming

Please rate the **"Employability Skills"** of current high school students or recent high school graduates at the entry-level positions in your business. Circle "yes" if you feel they are trained adequately or "no" if you feel they are not.

2.	Attendance	yes	no
3.	Work Habits	yes	no
4.	Interview Skills	yes	no
5.	General Work Attitudes	yes	no
6.	Technical Job Skills	yes	no
7.	Job Safety	yes	no
8.	Writing Skills	yes	no
9.	Communication Skills	yes	no
10.	Professionalism	yes	no

Please list any generalizations you can make about the quality of preparedness of the recent high school graduate or high school students in the work force.

Appendix D

Teacher Survey

Teachers,

Please take a few moments to complete the survey below. The results will help in the writing of our action research, which is part of the field-based masters program through Saint Xavier University. Thank you for your time and efforts.

Sincerely,

Greta Lesniak
Todd Cumming

Directions: Circle "Yes" or "No" for each question below.

Are you currently teaching any of the following programs?

Computer Classes	Yes	No
Industrial Technology	Yes	No
Family & Consumer Sciences	Yes	No
Cooperative Education	Yes	No
Tech Prep	Yes	No

Are any of the following **"Employability Skills"** taught in your classes?

Punctuality	Yes	No
Professional Work Ethics	Yes	No
Dressing for Success	Yes	No
Interviewing Skills	Yes	No
Specific Job Skills	Yes	No
General Work Skills	Yes	No
Work Safety	Yes	No
Communication Skills	Yes	No
Attendance	Yes	No

Do you feel that our high school prepares students for the world of work?

Yes No

Do you feel that our high school directs students to get the vocational training they will need for their career?

Yes No

Appendix E

Workplace Skills & Career Development Competencies Adopted by Illinois State Board of Education As Part Of The Illinois Learning Standards

Checklist

Workplace Skills	Completed Lessons Yes	No
Develop An Employment Plan	___	___
Identify short-term goals		
Demonstrate a drug-free status		
Seeking-Applying For Employment Opportunities	___	___
Prepare a resume		
Prepare for job interview		
Write job application letter		
Write interview follow-up letter		
Complete job application form		
Accepting Employment	___	___
Follow directions		
Communicating On The Job	___	___
Communicate orally with others		
Prepare written communication		
Follow written directions		
Ask questions about tasks		
Interpreting The Economics Of Work	___	___
Identify the role of business in the economic system		
Describe responsibilities of employee		
Describe responsibilities of employer or management		
Maintaining Professionalism	___	___
Work with others		
Identify work-related terminology		
Adapting To And Coping With Change	___	___
Recognize change and how to deal with change		
Solving Problems And Thinking Critically	___	___
Identify the problem		
Clarify purposes and goals		
Identify solutions to a problem and their impact		
Employ reasoning skills		
Evaluate options		
Set priorities		
Select and implement a solution to a problem		
Evaluate results of implemented option		

	Yes	No
Maintaining A Safe And Healthy Work Environment	___	___
Identify hazardous substances in the workplace		
Demonstrating Work Ethics And Behavior	___	___
Assume responsibility for decisions and actions		
Demonstrating Technological Literacy	___	___
Recognize impact of technological changes on tasks and people		
Maintaining Interpersonal Relationships	___	___
Recognize individual diversity		
Demonstrating Teamwork	___	___
Work with team members		
Evaluate team work results		
Career Development Competencies	___	___
Understand the relationship between work and learning		
Understand how work relates to the needs and functions of the economy and society		
Understand how to make decisions		
Be able to locate, understand and use career information		
Understand how societal needs and functions influence the nature and structure of work		
Know the importance of growth and change		
Understand developmental changes and transitions		
Be aware of the career planning process		

Appendix F

COOPERATIVE EDUCATION EVALUATION

Student-Learner _____ Employer _____

1. CO-OPERATION *Includes attitude toward work, company, supervisors, and associates; willingness to work with and for others.*	Unusually cooperative; favorable influence on associates Cooperates very well. Respected by co-workers Usually a good team worker Sometimes shows reluctance to cooperate Does not cooperate
2. INITIATIVE OR WILLINGNESS TO LEARN *Consider time required to learn new duties, methods; ability to grasp explanations.*	Self starting. Grasps new ideas or duties immediately Learns quickly. Needs little instruction Normal ability in learning new ideas Requires detailed instructions Instructions must be repeated many times
3. PUNCTUALITY AND ATTENDANCE *Consider general record of absenteeism and tardiness; promptness in returning from rest periods.*	Outstanding Very dependable Satisfactory Could improve Unsatisfactory
4. PERSONAL APPEARANCE *Consider general type of work being done.*	Outstanding Very satisfactory Satisfactory Could improve Unsatisfactory
5. QUALITY OF WORK *Entails accuracy, thoroughness, high quality work, and dependability of results; ability to turn out work which meets high quality standards.*	Quality of the highest possible standards Seldom makes errors. Follows instructions accurately Work of good quality and requires little checking Quality variable. Work needs careful inspection Poor quality work. Frequent errors
6. QUANTITY OF WORK *Consider amount of satisfactory work performed under normal conditions.*	Consistently high output Good output Satisfactory output Slightly below average output Low output
7. KNOWLEDGE OF JOB *Consider familiarity with requirements of job gained through experience, education, or specialized training.*	Does not require constant supervision; maintains high quality/quantity output Very good knowledge of job. Seldom needs instruction Adequate knowledge of job Requires more than average supervision and instruction Inadequate knowledge to perform job. Requires excessive supervision

8. ADDITIONAL COMMENTS:

BEST COPY AVAILABLE